

IN THE CLAIMS:

Please amend claim 1 as follows:

- A²
A B1
1. (Amended) A filtration device comprising at least one well, one or more pieces of filter, a filter retention device within the depth of the well and a mechanical interlock, said well and filter retention device being formed of a plastic and said interlock being one or more skives formed continuously from at least a portion of an inner wall of the well and wherein the interlock remains attached to and as a portion of the inner wall.

Cancel claims 13-15, and 17-23.

REMARKS

Claims 13-15 have been cancelled. Claims 13 and 14 have been incorporated into claim 1.

Claims 17-23 have been cancelled as they relate to a non-elected invention. Applicants reserve the right to file a divisional application on such claims. No amendment of inventorship is required by this cancellation.

New Figures 9 and 10a and b have been added to the application in order to comply with the requirements of paragraphs 6 and 7 of the office action. Support for Figure 9 is found in claims 5 and 6 which claim that least a portion of the inner wall of the well tapers outward toward the bottom of the well. Support for Figures 10a and b which show a 96 well plate according to the present invention is found in claim 16.

No new matter is added to the application by the addition of the new figures required by the office action.

Applicants also request the substitution of the attached set of drawings for those existing in the case as the original figures had contained a legend of 1/8, 2/8 etc. As there are now 10 pages of drawings the pages have been renumbered 1/10, etc. Substitution of the drawings will avoid any confusion.

Additionally, the specification has been amended to insert two new paragraphs at the section entitled IN THE DRAWINGS to describe the new drawings that have been requested to be inserted. Support for these insertions is the same as for the drawings they refer to and no new matter has been added.

A copy with the marked changes to the text and claims are attached.

Claims 1, 7 10 and 13 and 14 have been rejected under 35 USC 102(b) as being anticipated by DeSalvo (US 5,284,586). Applicants respectfully disagree.

DeSalvo shows a method of forming a metal crimp seal around a metal screen in order to retain it in place. To do so, it makes a single cut of the metal housing to form a flap at an inward angle from the wall and then crimps it over to form a flat ring.

This is unlike the mechanical interlock claimed in the present invention in which a continuous skive is formed from a portion of the wall made of plastic to lock the filter in place. This is neither taught nor suggested by the cited reference.

The reference is limited to a metal wall and the use of a simple crimp as the mechanical interlock and therefore fails to teach each and every element of the claim.

Moreover, it would not have been obvious to one of ordinary skill in the art to have substituted the crimp of the reference for the rolling skive of the present invention. There is no motivation to do so in the cited reference.

In regard to claims 7 and 10, as the reference fails to teach or suggest the subject matter of claim 1, it also fails to teach or suggest the subject matter of dependent claims 7 and 10.

Claims 1-3,7-12 and 15 have been rejected under 35 USC 102(b) as being anticipated by Johnson (US 5,695,639). Applicants respectfully disagree.

Johnson relates to a two piece funnel device having an upper portion containing an open well or funnel and a lower spout member containing a filter retention device and a seal is formed between the upper and lower pieces with the filter in between by the bottom of the upper piece being positioned above the filter retained on the lower piece. The upper piece is of a weight sufficient to create the seal.

There is no mechanical interlock as claimed in the present claims. Instead, there is simply a seal formed between the bottom of the top piece and the top of the bottom piece that is maintained simply by the weight of the top piece acting through gravity on the lower piece.

Moreover, there is no retention device within the well as asserted by the office action. The reference clearly teaches the lower spout portion contains the central grid on which the filter is positioned.(see column 2, lines 37-39, " The lower spout member has a flat head portion with a central grid(for supporting the filter disk)....") . There is no teaching of the grid being within the depth of the well (asserted to be the upper reservoir section of the device of the reference by the office action). Instead there is a clear teaching that it is not part of the well at all.

Likewise, the tapered portion 7 shown in Figure 1 of the reference is characterized as being a "separate sloping inner wall" (Column 3, line 32). Figure 3 make the sloping portion 7' part of the inner wall but still fails to teach or suggest that a skive be formed from that portion of the wall to form a mechanical interlock. Instead, as mentioned above, the seal is formed by the bottom of the upper part sitting on the top of the bottom part, relying on gravity and the weight of the top piece to hold the device together. It is a totally different device configuration and method of forming a seal.

In paragraph 21 of the office action it is asserted that the reference teaches the device is made of a single molded plastic piece. Applicants fail to find any support for that assertion. To the contrary they find a clear teaching that the device of Figure 3 is still a two piece device containing the same deficiencies of the device of Figure 1. (See column 4, line 61, "the two members ".... and Figures 4 and 5 and the discussion about them (Column 4 line 61-Column 5, line 5) that show these two members in different storage arrangements.). The passages

cited in the paragraph to support the assertion clearly fail to support that assertion and to the contrary clearly teach the opposite proposition (being formed of two separate and distinct pieces) (See column 2, lines 21 and 22, "two members, namely an upper reservoir member and a lower spout member....", and Column 2, lines 28-29 " Both the upper reservoir and lower spout members"), Applicants request withdrawal of this basis for the rejection as it is unsupported by and contrary to the express teachings of the reference.

Applicants believe that the Johnson reference fails to teach or suggest the present invention of claims 1 and its dependent claims 2-3 and 7-12.

Claims 1-8, 10 and 15 have been rejected under 35 USC 102(b) as being anticipated by Callahan (US 5,503,740). Applicants respectfully disagree.

Callahan is similar in design and deficiencies to that of Johnson discussed above. It is a two piece device with the lower spout portion containing the filter retention means rather than the filter retention means being within the depth of the well portion as is required by the present claims.

Additionally, it uses a threaded connection to form a mechanical lock between the upper and lower members which traps the filter between them. This threaded connection is formed between the outside wall of the well 20 and the inside wall of the lower spout piece, not the inner wall of the well as is asserted by the office action, and is quite unlike that claimed in the present invention. This is most clearly seen in Figure 7 (which is a close up of the bottom portion of Figure 6) of the reference in which the threads 38 of the wall 24 are on the outside wall of the upper piece and which mate with the inner threads 36 of the lower piece. Additionally, neither of these portions form the interlock for the filter, rather it is the bottom portion 58 of the wall that makes contact with the filter and it is not a skive formed from the inner wall of the well.

While Callahan might seem to suggest an inward taper to the inner wall of the top piece from its drawings and description of the piece as a funnel, Applicants find no specific mention of a taper or the range of taper that might be used in such a device and find no support for the rejection of the claims that specifically claim the taper in general or within the claimed ranges in combination with the elements of claim 1 of the present invention.

As to claims 5 and 6, it is asserted that a portion of inner wall is tapered outward. Applicants disagree. In fact, it is a flange formed on the outer surface of the wall that extends outward (See element 50 of Figure 7) which is contrary to the teachings of the present claims. Moreover it could not be used to form the claimed skive of the present invention and there is no teaching or suggestion nor motivation to eliminate the threaded connection formed on the outer portion of the wall, redesign the inner wall portion to have an outward taper and then create a skive to hold the filter in place.

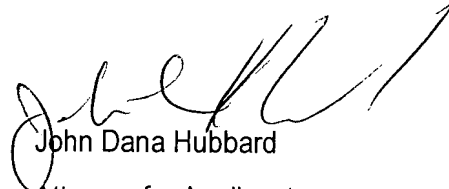
Moreover as the dependent claims all depend from claim 1 and Callahan fails to teach or suggest the invention of claim 1 it is believed that the dependent claims rejected over Callahan are patentable as Callahan fails teach or suggest all the necessary elements of the invention as claimed.

Claim 16 has been rejected under 35 USC 103(a) as obvious in view of Johnson. Applicants disagree.

The office action states that while Johnson teaches only one well, it would have been obvious to use multiple wells as presently claimed as a design choice. Applicants disagree. Johnson fails to teach or suggest the present invention as claimed in claim 1 and would also fail to teach or suggest that invention in a multiple well format. Moreover, Johnson requires each device to be made of two pieces and it is unclear how one could extrapolate using a top and bottom individual piece into singular multiple well format. There is no suggestion nor motivation to take what is clearly indicated and taught to be a single well item and somehow transform it into a multiple well device absent the teachings of the present invention. As such it is believed that Johnson fails to suggest the claimed invention of claim 16.

Applicants believes this reply is complete and conforms to the requirements of the Office Action. Applicants's attorney requests that the Examiner call him if it is believed that this reply is not in complete compliance with any of the Office Action's requirements.

Respectfully Submitted,

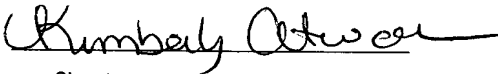

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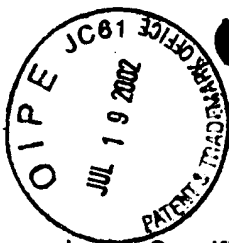
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Signature

Kimberly Atwood

Typed name of person signing



VERSION with MARKINGS to SHOW CHANGES

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In The Specification:

At page 2, at line 32 insert the following new paragraphs as follows:

- Figure 9 shows an alternative embodiment of the present invention in cross sectional view.

Figures 10a and 10 b show a 96 well filtration device according one embodiment of the present invention in planar and cross sectional view respectively. - -

In the Claims:

1. (Amended) A filtration device comprising at least one well, one or more pieces of filter, a filter retention device within the depth of the well and a mechanical interlock, said well and filter retention device being formed of a plastic and [,] said interlock being one or more skives formed continuously from at least a portion of an inner wall of the well and wherein the interlock remains attached to and as a portion of the inner wall.

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